510(k) Summary

[in accordance with SMDA of 1990, 21 CFR 807.92(c)]

NOV - 2 2011

Contact:

Mr. Hartmut Loch

Vice President, Regulatory Affairs & Quality Assurance

Phygen, LLC.

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Date Prepared:

September 30, 2011

Trade name:

LEUCADIA™ MIS Pedicle Screw System

Common name:

Spinal Fixation System

Classification

,

name:

§ 888.3070 - Orthosis, Spinal Pedicle Fixation, For Degenerative Disc

Disease (NKB) - Class III § 888.3050 - Appliance, Fixation, Spinal Interlaminal (KWP) - Class II

§ 888.3060 - Spinal Intervertebral Body Fixation Orthosis (KWQ) - Class II § 888.3070 - Pedicle Screw Spinal System (MNI) - Class II

§ 888.3070 - Pedicle Screw Spinal System

(MNH) - Class II

All Orthopedic Device Panel 87

Product Code (s):

NKB, KWP, KWQ, MNI, & MNH

<u>Device Description</u> and Characteristics:

The Leucadia™ MIS Pedicle Screw System is intended to help provide correction, immobilization and stabilization of spinal segments as an adjunct

to fusion of the thoracic, lumbar and/or sacral space.

The Leucadia™ MIS Pedicle Screw System consists of a variety of rods and

cannulated screws, which can be rigidly locked into a variety of

configurations, with each construct being tailor made for the individual case. Multi-axial implant screws are supplied in 5mm, 6mm, and 7mm diameter sizes. All sizes are able to receive 5.5mm connecting rods only. The ø1.7mm cannulation allows the screws to be implanted over a guidewire in a "mini open" or minimally invasive procedure. The Leucadia™ MIS Pedicle Screw System implant components are fabricated from medical grade titanium alloy (Ti-6AI-4V ELI) conforming to ASTM F136 or equivalent.

The Leucadia™ MIS Pedicle Screw System is a temporary implant system, intended to be removed after solid fusion has occurred. Leucadia™ MIS Pedicle Screw System implant components should not be used with components from any other system or manufacturer. As with all orthopedic implants, Leucadia™ MIS Pedicle Screw System components should not be

reused.

Equivalence:

The modified LEUCADIA™ MIS Pedicle Screw System is substantially equivalent to the LEUCADIA™ Pedicle Screw System (K110588 – S/E May

25, 2011), which is manufactured and marketed by Phygen, LLC.

Indications:

The LEUCADIA™ MIS Pedicle Screw System is intended to be used as an adjunct to fusion using autograft or allograft in posterior, non-cervical fixation for the following conditions: degenerative disc disease (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); spondylolisthesis; trauma (i.e. fracture or dislocation); spinal stenosis; curvatures (i.e. scoliosis, kyphosis and/or lordosis); tumors; pseudarthrosis; and/or failed previous fusion.

Performance data:

Biomechanical tests per ASTM F1717-10 (Static Compression Bending, Static Torsion, and Dynamic Compression Bending) as well as the Screw Pullout Tests per ASTM F543-07 have been performed. The test results were equivalent to the predicate device and/or other similar implants and are sufficient for *in vivo* loading.



Food and Drug Administration 10903 New Hampshire Avenue Document Control Room –WO66-G609 Silver Spring, MD 20993-0002

NOV 2 2011

Phygen, LLC % Mr. Hartmut Loch Vice President, Regulatory Affairs and Quality Assurance 2301 Dupont Drive, Suite 510 Irvine, California 92612

Re: K112931

Trade/Device Name: LEUCADIA[™] MIS Pedicle Screw System

Regulation Number: 21 CFR 888.3070

Regulation Name: Pedicle screw spinal system

Regulatory Class: Class III

Product Code: NKB, MNI, MNH, KWP, KWQ

Dated: September 30, 2011 Received: October 03, 2011

Dear Mr. Loch:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you; however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

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Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

for Mark N. Melkerson

Director

Division of Surgical, Orthopedic and Restorative Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

Indications for Use

LEUCADIA™ MIS Pedicle Screw System

Device Name(s):

| Indications for Use: | |
|---|--|
| The LEUCADIA™ MIS Pedicle Screw System is intended to be used as an adjunct to fusion using autograft or allograft in posterior, non-cervical fixation for the following conditions: | |
| Degenerative disc disease (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); spondylolisthesis; trauma (i.e. fracture or dislocation); spinal stenosis; curvatures (i.e. scoliosis, kyphosis and/or lordosis); tumor pseudarthrosis; and/or failed previous fusion. | |
| Prescription Use X AND/OR Over-The-Counter-Use (Part 21 CFR 801 Subpart D) (21 CFR 801 Subpart C) | |
| PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED | |
| Concurrence of CDRH, Office of Device Evaluation (ODE) | |
| | |
| (Division Sign-Off) Division of Surgical, Orthopedic, and Restorative Devices | |
| 510(k) Number <u> </u> | |